

CLAIMS

What is claimed is:

1. A support assembly for use with a vehicle article carrier comprising:

a one-piece support having a base portion and a rail portion, a first attachment mechanism being associated with said support; and

a cover, said cover having a second attachment mechanism engaging said first attachment mechanism to secure said cover to said support.
2. A support assembly as recited in claim 1, wherein said support includes a pair of sidewalls maintained in a spaced relationship by a web extending therebetween, said sidewalls and said web defining said base portion and said rail portion.
3. A support assembly as recited in claim 2, wherein said support is formed from stamped metal.
4. A support assembly as recited in claim 3, wherein said rail portion includes an ear integral with said side wall, said ear being deformed into mating engagement with an adapter component to compressingly retain it within said support.
5. A support assembly as recited in claim 4, wherein said adapter component is a plug.
6. A support assembly as recited in claim 1, wherein said cover is removably connected to said support
7. A support assembly as recited in claim 5, wherein said first attachment mechanism and said second attachment mechanism comprises at least one of receiving holes and a male protrusion adapted to be received therein.

8. A support assembly as recited in claim 5, wherein said first attachment mechanism comprises at least one of a groove and a tab adapted to be matingly engaged therewith.

9. A support assembly as recited in claim 1, wherein said sidewalls and said web define a channel and said cover substantially covers said support including closing said channel, thereby protecting said support from environmental conditions.

10. A support assembly as recited in claim 1 further including a gasket affixed to a bottom of said support

11. A support assembly as recited in claim 1, wherein a plurality of covers of differing shape may be used with a single support.

12. A support assembly as recited in claim 1, wherein said support is stamped metal.

13. A support assembly as recited in claim 1, wherein said support is molded.

14. A support assembly as recited in claim 1, wherein said support is die-cast.

15. A support for use with a vehicle article carrier, said support in combination with other like supports maintaining at least one siderail or at least one crossrail in a spaced relationship from a surface of the vehicle, said support comprising:

at least two substantially parallel sidewalls;

a web extending between and maintaining said sidewalls in a spaced apart relationship;

a first end of said support defining a base portion and a second end of said support defining a rail portion.

16. A support as recited in claim 14, wherein said base portion defines at least one aperture for attachment of said support to the vehicle.

17. A support as recited in claim 15, wherein a portion of said web defining part of said base portion further defines said at least one aperture.

18. A support as recited in claim 16, further including a pedestal extending from said web portion, and said at least one aperture is defined by said pedestal.

19. A support as recited in claim 14, wherein said rail portion has a first end affixed to said base portion and generally perpendicular thereto and a second end for attaching a rail, said second end displaced from and generally parallel to said base portion.

20. A support as recited in claim 18, wherein said rail portion further includes a transition portion between said first end and said second end of said rail portion.

21. A support as recited in claim 19, wherein said transition portion is angled with respect to said base portion.

22. A support as recited in claim 20, wherein said transition portion is curved.

23. A support as recited in claim 14, wherein said sidewalls define a plurality of openings for receiving male protrusions of a cover.

24. A support assembly as recited in claim 14, wherein said support is stamped metal.

25. A support assembly as recited in claim 14, wherein said support is molded.

26. A support assembly as recited in claim 14, wherein said support is die-cast.

27. A support assembly for use with a vehicle article carrier comprising:

a one-piece support having a generally U-shaped cross-section, said U-shape defined by sidewalls and a web extending therebetween, said support having a base portion and a rail portion wherein said web in said base portion has at least one pedestal extending from a bottom of said U-shape and defining at least one hole therethrough for affixing said support to the vehicle, and further wherein said rail portion is generally angled with respect to said base portion such that an end opposite from said base portion is generally parallel to and spaced from said web of said base portion, said opposite end of said rail portion further including ears;

an adapter component received in said opposite end of said rail portion and at least partially retained by said ears and partially retained by said sidewalls and said web;

a gasket affixed to a bottom of said support; and

a cover extending over said support and engaged thereto.

28. A support assembly as recited in claim 26, wherein said ears are deformable for engaging said adapter component.

29. A support assembly as recited in claim 27 wherein said adapter component is a plug having a non-symmetrical cross-section for preventing rotation of said plug with respect to said support.

30. A support assembly as recited in claim 26 wherein said adapter component is press fit into said rail portion.

31. A support assembly as recited in claim 26 wherein said gasket defines a central aperture therethrough and further wherein said at least one pedestal extends through said central aperture.

32. A support assembly as recited in claim 26 wherein said gasket includes at least one deformable male protrusion engaging openings defined by said web in said base portion.

33. A support assembly as recited in claim 26 wherein said cover includes a plurality of male protrusions engaging a plurality of like spaced openings in said sidewalls of said support.